

Application No.: 10/849,574
Amdt dated: December 11, 2009
Reply to Office action of March 17, 2009

REMARKS

This Amendment is in response to a Final Office Action dated September 11, 2009. Claims 1-2, 4-7, and 9-16 were considered by the Examiner. In this paper, no claims have been amended, no claims have been canceled, and no new claims have been added. Accordingly, Claims 1-2, 4-7, and 9-16 remain for further consideration. No new matter has been added in these amendments.

Summary of the Office Action

In the Office Action, Claims 1-2, 4-7, and 9-16 were rejected under 35 U.S.C. § 112 as being indefinite. Claims 1, 2, 4-7 and 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 5,820,600) in view of Konig (U.S. Patent No. 4,513,948). Claims 12-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson in view of Konig further in view of Smith (U.S. Patent No. 7,025,747). For at least the reasons discussed herein, Applicant respectfully traverses these rejections.

Regarding the Rejections under 35 U.S.C. §112.

As noted above, Claims 1-2, 4-7, and 9-16 were rejected as being indefinite. More specifically, the Office Action indicated uncertainty regarding the recited "follower member." Applicant respectfully traverses this rejection.

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The specification as filed includes clear, definite statements supporting the recited "follower member" at least at page 2, in the paragraph beginning with "the jaws are preferably movable along guides . . .," (corresponding to paragraph [0009] of the corresponding Patent Application Publication), which indicates that each "jaw preferably comprises *a follower member adapted to be received in a respective guideway in the actuator.*" (Emphasis added). The following paragraph (corresponding to paragraph [0010] of the Patent Application Publication), indicates that the follower member can include "a projection or other follower" that can be received in the guideway in the actuator. In one embodiment, as indicated on page 4 of the specification as filed, in the paragraph beginning with "the carrier plate 18 . . . " (corresponding to paragraph [0032] of the Patent Application Publication), the follower member can comprise "a lug 8 extending axially from the upper surface of the jaw," and such a configuration is illustrated in Figures 1-3 and recited in Claim 5.

Accordingly, for at least the reasons discussed above, the recitation of a "follower member" in Claim 1 is definite. Thus, Applicant respectfully requests that the rejection of Claim 1 and its dependent claims be withdrawn.

The Combination of Carlson and Konig Fails to Disclose or Suggest The Seal Recited in Claim 1.

Claim 1 relates to a seal for laparoscopic port comprising, among other limitations, a base, a multiplicity of jaws, an actuator rotatable to urge the jaws to move

between an open position and a closed position, and a diaphragm. The base includes, among other limitations, "a plurality of guides." The jaws are movable radially "along the plurality of guides." The jaws each comprise "a follower member extending therefrom." The actuator has "a plurality of guideways formed therein," with the follower member of each of the multiplicity of jaws being received in a corresponding one of the plurality of guideways. Each jaw includes "a radially outwardly facing portion adapted to engage" a lip of the diaphragm "so that the aperture of the diaphragm is forced to open as the jaws move to an open position." However, the applied combination of Carlson with Konig fails to disclose or suggest all of the recitations of Claim 1, from which Claims 2, 4-7 and 9-11 depend.

Carlson describes an adjustable introducer valve having two valve members and a flexible membrane. (Carlson, col. 5, lines 61-63). The membrane includes an outer edge coupled with one of the valve members. (Carlson, col. 8, lines 29-34). Axial movement of the two valve members relative to each other cause this membrane to stretch or relax thereby changing the area of an aperture formed therein. (Carlson, col. 8, lines 34-49, Figures 2, 3). Carlson also describes holding members for securing an instrument at or near the center of the membrane. (Carlson, col. 9, lines 63-66, Figures 5A, 5B). Carlson indicates that the holding members "may be actuated by movement of ring 50 so that the size of central opening 116 [defined between inner ends of the holding members] corresponds to the size of aperture 62." (Carlson, col. 10, lines 15-18).

Accordingly, Carlson fails to disclose jaw members movable along guides of a base and that have follower members received in a guideway of an actuator, as recited in Claim 1. The Office Action indicates that Carlson "does not disclose a separate actuator," configured as recited in Claim 1.

Carlson further fails to disclose or suggest that the holding members engage the membrane, as is recited with respect to the jaws and the diaphragm of Claim 1. The Office Action asserts that a combination of certain aspects of Figures 4 and 5a of the Carlson reference meet the recited engagement. However, Carlson expressly presents the embodiment of Figure 5a *as an alternative* to that of Figure 4. (Carlson, col. 9, lines 53-61). Carlson completely fails to disclose or suggest that the holding members can engage the membrane. Carlson likewise fails to disclose or suggest that the holding members include "a radially outwardly facing portion adapted to engage" a lip of the membrane, as recited with respect to the jaws and the diaphragm of Claim 1. Rather, Carlson indicates that the holding members are coupled to the dilator ring 50 and engage an outer surface of an instrument shaft. (Carlson, col. 9, line 53-col. 10, line 18).

Moreover, it would not be obvious to make the combination of various elements from Figures 4 and 5a, as suggested in the Office Action because, as discussed above, Carlson describes *a completely different mechanism* to change the size of the aperture in the membrane. (See, e.g., Carlson, col. 8, lines 24-49). Thus, contrary to the assertion in the Office Action, Carlson never discloses or suggests that the holding

members can be used to move the membrane. Furthermore, engaging the illustrated three holding member assembly of Figure 5A with the membrane would destroy the symmetric stretching of the membrane in a circular shape, indicated to be preferred to minimize leakage in the Carlson device. (Carlson, col. 6, lines 18-22; col. 8, lines 34-37). Thus, making the suggested combination would render the Carlson device inoperable for its intended purpose.

Konig relates to a diaphragm regulating valve for the flow regulation of a fluid medium. (Konig, abstract). The König valve has two housing housing plates 1, 2 and a plurality of diaphragm elements 8 embedded within a cylindrical recess 7 in the upper housing plate 1. (Konig, col. 2, lines 45-54). Every two adjacent diaphragm elements 8 are in contact along arm edges 11 common to them. (Konig, col. 2, lines 58-60). These arm edges 11 perform both as "a guide" and "a seal between the adjacent elements 8." (Konig, col. 2, lines 60-63). König fails to disclose a separate diaphragm or membrane engaged by the diaphragm members 8. (Konig, Figures 1-10). König likewise fails to disclose or suggest that the diaphragm members include "a radially outwardly facing portion adapted to engage" a lip of a diaphragm, as recited with respect to the jaws recited in Claim 1. Rather, as noted above, the contact of the diaphragm elements 8 perform a sealing function with adjacent diaphragm elements.

Accordingly, neither Carlson or König disclose or suggest the recited seal having jaws which engage a diaphragm. Rather, Carlson discloses holding members movable independently of a membrane, and König fails to disclose a diaphragm or

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membrane entirely. Accordingly, for at least the reasons discussed above, Claim 1 is distinguishable over the applied combination of Carlson and Konig. Claims 2, 4-7 and 9-11 depend from Claim 1 and recite additional novel and nonobvious limitations thereon. Accordingly, Claims 2, 4-7 and 9-11 are distinguishable over the applied combination of references for at least the reasons discussed above with respect to Claim 1.

The Asserted Combination of Carlson, Konig, and Smith Fails to Disclose or Suggest the Seal Recited in Claims 12-16.

As noted above, Claims 12-16 were rejected as being unpatentable over Carlson in view of Konig, and further in view of Smith. Claims 12-16 depend from Claim 1 and recite additional novel and nonobvious limitations thereon. For at least the reasons discussed above, the combination of Carlson and Konig fails to disclose or suggest all of the recitations of Claim 1.

Smith likewise fails to disclose or suggest the deficiencies of Carlson and Konig with respect to Claim 1. For example, Smith describes a valve assembly having a diameter reduction structure. The diameter reduction structure includes an assembly of three stand offs 950 and three linking members 971. (Smith, col. 13, lines 27-36). The diameter reduction structure also includes an annular bias member 969 to bias standoffs 950 in a particular direction. (Smith, col. 13, lines 45-54). The standoffs also include a "system of cogs synchronizing the movement of standoffs," although other

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linking mechanisms are alluded to. (Smith, col. 8, lines 46-53). However, regardless of the linking mechanism, Smith fails to disclose or suggest that the diameter reduction structure engages a diaphragm, as recited with respect to the jaws recited in Claim 1.

Accordingly, for at least the reasons discussed above, the asserted combination of references fails to disclose or suggest all of the recitations of Claim 1, from which Claims 12-16 depend. Thus, for at least the reasons that Claim 1 is distinguishable over the applied art, Claims 12-16 are likewise distinguishable over the applied art.

Conclusion

For at least the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims. Accordingly, issuance of a Notice of Allowability is most earnestly solicited.

Applicant respectfully traverses each of the Examiner's rejections and each of the Examiner's assertions regarding what the prior art shows or teaches. Although amendments have been made, no acquiescence or estoppel is or should be implied thereby. Any arguments in support of patentability and based on a portion of a claim should not be taken as founding patentability solely on the portion in question; rather, it is the combination of features or acts recited in a claim which distinguishes it over the prior art.


The undersigned has made a good faith effort to respond to all of the rejections in the case and to place the claims in condition for immediate allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is

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respectfully requested to call Applicant's attorney, John F. Heal, at (949) 713-8283 to resolve such issues promptly.

Sincerely

APPLIED MEDICAL RESOURCES

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